

R E M A R K S

Applicant respectfully requests further examination and reconsideration in view of the arguments set forth fully below. Claims 1-36 were previously pending in this application. Claims 1-17 and 29-36 are rejected. Claims 18-28 are allowed. Accordingly, Claims 1-36 are now pending in this application.

Rejections Under 35 U.S.C. § 102

Within the Office Action, Claims 1-5 stand rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 5,715,372 issued to Meyers et al. (hereinafter “Meyers”). The Applicant respectfully traverses this rejection.

Meyers teaches an apparatus that measures a characteristic of an input signal. A feature extraction system 20 derives a feature set from an input signal. A feature set is described as a group of signal parameters which characterize the input signal. The feature set extracted from the input signal is sent from the feature extraction system 20 to an intelligent system 30. The intelligent system 30 determines a relationship between the feature set and corresponding signal characteristics. Meyers teaches that the intelligent system 30 operates on the feature set to produce an output signal which characterizes the input signal for the attribute being measured.

The intelligent system 30 is trained in the relationships between feature sets and signal characteristics in order to accurately characterize the feature set extracted from the input signal (Meyers, col. 5, lines 47-55). The intelligent system 30 is trained and tested using test results from previous human MOS tests, where MOS is a signal characteristic to be measured (Meyers, col. 7, lines 14-16). In other words, prior to analyzing the input signal, the intelligent system 30 is trained and that training is tested for accuracy against previous human test results.

Within the Office Action, it is stated that Meyers teaches the claimed limitation of “means for extracting an attribute from the output” and “means for selecting one of a plurality of human reviewers based on the attribute”. To support this assertion, column 7, lines 13-47 of Meyers are cited. However, this cited portion of Meyers is directed to the training and testing of the intelligent system 30, as described above. It is stated in the Office Action that Meyers

teaches “matching eight signal characteristics with the signals used for the MOS test, and using the score to rate the system”. However, the “eight signal characteristics” are measurements taken from eight speakers during the training session (Meyers, col. 7, lines 16-23). The eight signal characteristics are in no way related to the feature set extracted from the input signal, as the training session is used to prepare the intelligent system 30 for use in analyzing a subsequently received input signal. As such, Meyers does not teach the use of a human to review the output signal, where the output signal is generated in response to the input signal.

Further, there is no hint, teaching, or suggestion within Meyers that indicates the selection of human reviewer. The human reviewer reviews an output generated in response to an input. As applied to Meyers, a human reviewer would need to be someone that reviews the output signal generated by the intelligent system 30 in response to receiving the input signal. The “speakers” referred to in the Office Action, are those speakers used in the initial training of the intelligent system 30. There is no indication within Meyers that these speakers are used to review any kind of output signal, and further there is no indication that these speakers are selected in response to the feature set selected from the input signal.

The independent Claim 1 is directed to an apparatus for improving productivity of human review of an automatically transcribed output generated by an information processing system, wherein the output is generated in response to an input. The apparatus includes means for extracting an attribute from the output, and means for selecting one of a plurality of human reviewers based on the attribute. As discussed above, Meyers does not teach the use of human reviewers. Further, Meyers does not teach selecting a human that reviews an output, where the output is in response to an input. Still further, Meyers does not teach selecting a human reviewer from a plurality of human reviewers based on an extracted attribute of the input. For at least these reasons, the Applicant respectfully submits that the subject matter of the independent Claim 1 is allowable over the teachings of Meyers and as such is an allowable base claim.

Claims 2-5 are each dependent upon the independent Claim 1. As discussed above, Claim 1 is allowable over the teachings of Meyers. Accordingly, Claims 2-5 are each also allowable as being dependent upon an allowable base claim.

Rejections Under 35 U.S.C. § 103

Within the Office Action, Claims 6-17 and 29-36 stand rejected under 35 U.S.C. §103(a)

as being unpatentable over U.S. Patent No. 6,122,614 issued to Kahn et al. (hereinafter "Kahn") in view of U.S. Patent No. 5,991,595 issued to Romano et al. (hereinafter "Romano"). The Applicant respectfully traverses this rejection.

Kahn teaches matching two different converted text documents, both related to the same voice file, and determining words that don't match when comparing the two text documents to each other. This is nearly the opposite of searching a single document for a particular keyword, also known in the art as word-spotting. Kahn teaches determining a list of words that do not match. In other words, Kahn teaches means for extracting a list of words from a first text document that do not match words from a second text document (Kahn, col. 2, lines 34-38). This necessitates that each of the first text document and the second text document are nearly identical, for if not, the list of unmatched words may include the entire first text document. Therefore, Kahn requires two nearly identical text documents to be compared in order to generate the list of unmatched words. The present invention requires no such restrictive requirement. The present invention, as is described below, performs a form of word-spotting on a single document. Word-spotting is not the same as determining unmatched words. As such, Kahn does not teach detecting a keyword from a document.

Romano teaches presenting constructed responses through electronic workfolders for human evaluation. Constructed responses are defined as open-ended responses, such as essay answers, to test questions. The constructed responses are sent to a reader or rater for evaluation and for receiving scores from the reader. A processor selects which particular reader an electronic workfolder is directed to based on whether the reader is in training or has been qualified and is actually scoring production responses (Romano, col.4, lines 39-44).

Within the Office Action, Romano is cited for choosing the reviewer (reader) based on a correlation between the information of the document and the reviewer's (reader's) rating. Romano is neither cited for extracting a keyword from a document nor for allowing a selected reviewer to review the document.

The present invention is directed to an apparatus for improving productivity of human reviewers of transcribed documents generated by media conversion systems. A server receives and stores voice files created by users of the system. The server is configured for coupling to a speech-to-text media conversion system to receive converted text files of the audio voice files. The server analyzes the converted text files and routes the converted files to an appropriate

reviewer according to an adaptive algorithm.

The server includes a reviewer database that stores a plurality of skill sets for each of the reviewers. A skill set is a list of keywords that a reviewer is familiar with. For instance, for a reviewer proficient in reviewing or transcribing medical documents, his skill set will include common medical terms. The server determines which one of the reviewers should review the text document. The server makes this decision by first extracting a list of keywords from the converted text file. The keywords are extracted from the text file by searching the document and comparing it to a keyword database. The server then matches the list of keywords to a skill set within the reviewer database. If the skill set of a reviewer matches the keywords, and if that particular reviewer is available, the server will route the text document file and pointers corresponding to the voice file to a workstation associated with the reviewer.

The present invention teaches using detected, or spotted, keywords to select a particular reviewer. This follows since the detected keywords are related to a particular subject matter, as claimed in Claim 10, and each reviewer is associated with specific fields of knowledge. However, if Romano is applied to Kahn as suggested in the Office Action, then a reviewer (reader) as taught by Romano would need to be selected based on the list of unmatched words, as taught by Kahn. But, how does a list of unmatched words relate to a subject matter that can be used to select a particular reviewer? It can not be since the list of unmatched words are merely a list of unrelated words. Therefore, applying an unmatched word extractor of Kahn to a reviewer (reader) selection process of Romano does not result in selecting a particular reviewer based on a particular subject matter as determined by an extracted keyword, as presently claimed.

The independent Claim 7 is directed to an apparatus for facilitating review of an automatically transcribed document generated by a media conversion system, wherein the document is generated in response to an input. The apparatus includes means for extracting a keyword from the document, means for selecting one of a plurality of reviewers in response to the keyword, and means for transmitting the input and the document to the selected reviewer for review. As discussed above, neither Kahn, Romano, nor their combination teach selecting a reviewer in response to the extracted keyword. For at least these reasons, the Applicant respectfully submits that the subject matter of the independent Claim 7 is allowable over the teachings of Kahn, Romano, and their combination and as such is an allowable base claim.

Claims 8-17 are each dependent upon the independent Claim 7. As discussed above,

Claim 7 is allowable over the teachings of Kahn, Romano, and their combination. Accordingly, Claims 8-17 are each also allowable as being dependent upon an allowable base claim.

The independent Claim 29 is directed to a method of improving productivity of human review of an automatically transcribed document generated by an information processing system, wherein the document is generated in response to an input. The method includes extracting an attribute from the document, and selecting one of a plurality of human reviewers based on the attribute. As discussed above, neither Kahn, Romano, nor their combination teach selecting a human reviewer based on an extracted attribute. For at least these reasons, the Applicant respectfully submits that the subject matter of the independent Claim 29 is allowable over the teachings of Kahn, Romano, and their combination and as such is an allowable base claim.

Claims 30-36 are each dependent upon the independent Claim 29. As discussed above, Claim 29 is allowable over the teachings of Kahn, Romano, and their combination. Accordingly, Claims 30-36 are each also allowable as being dependent upon an allowable base claim.

Claim 6 is dependent on the independent Claim 1. As discussed above, Claim 1 is allowable over the teachings of Meyers. Accordingly, Claim 6 is also allowable as being dependent on an allowable base claim.

Within the Office Action, Claims 18-28 are allowed.

For at least the reasons given above, Applicant respectfully submit that all of the claims are in a condition for allowance, and allowance at an early date would be appreciated. Should the Examiner have any questions or comments, he is encouraged to call the undersigned at (408) 530-9700 to discuss the same so that any outstanding issues can be expeditiously resolved.

Respectfully submitted,
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CERTIFICATE OF MAILING (37 CFR§ 1.8(a))

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